

Bull. Natn. Sci. Mus., Tokyo, Ser. A, **20** (2), pp. 83–86, June 22, 1994

*Nipponosega yamanei* gen. et sp. nov., a New Remarkable  
Cuckoo Wasp (Hymenoptera, Chrysididae,  
Amiseginae) from Japan<sup>1)</sup>

By

**Nicolai V. KURZENKO and Arkady S. LELEJ**

Institute of Biology and Pedology, Far East Branch of  
Russian Academy of Sciences, Vladivostok-22, 690022 Russia

**Abstract** A new genus of brachypterous cuckoo wasp, *Nipponosega*, with the single included species *N. yamanei* sp. nov. is described from Ibaraki Prefecture, Honshu.

Among numerous wasps collected in Honshu in the summer of 1993, we have found one brachypterous specimen of cuckoo wasp which belongs to the subfamily Amiseginae. There are 35 species in 14 genera of these wasps in East Asia and the Oriental Region (KROMBEIN, 1983; KIMSEY & BOHART, 1990), including one described species *Cladobethylus japonicus* KIMSEY, 1986, from Japan. Japan is situated at the northern border of distribution of amisegine wasps. We regard that our specimen belongs to a new genus and will be the second representative of these exotic wasps in Japan. The species of this subfamily are known as parasite of walking stick eggs. The host of the new genus is unknown, but there are 8 species of walking sticks (fam. Phasmatidae) in Honshu and some of them may be the hosts of *Nipponosega*.

*Nipponosega* gen. nov.

(Figs. 1–6)

Type species: *Nipponosega yamanei* sp. nov., by present designation.

*Generic diagnosis.* Head (Figs. 1–3). Malar space without vertical sulcus; scapal basin moderately deep without lateral carinae, with some cross-ridging and defined medial groove in the lower one-third, the latter limited above by smooth and shining area; eyes large, irregularly bulging with relatively long dense erect setulae; vertex rather flat; the distance between posterior ocelli approximately twice as wide as one between posterior ocellus and eye and 0.7 times as wide as one between posterior and medial ocelli; occipital carina well developed and approximately reaching the level of lower border of eyes, with very weak dorsal medial enlargement; anterior border of clypeus weakly emarginate with thickened transparent part; female flagellum short, fusiform and flattened below, scape 0.95 times as long as combined lengths of pedicel

1) Report No. 38 from the Russia/Japan Cooperative East Asian Entomological Program.

and first two flagellar segments, intermediate flagellar segments 0.64–0.73 times as long as wide.

Thorax (mesosoma) long and narrow, female strongly brachypterous, tegulae and wing pads present and visible (Fig. 2). Pronotum long with strongly convex medial part of dorsum laterad of it with weak longitudinal impressiom, 1.45 times long (medial distance from anterior border of collar) as combined medial lengths of scutum and scutellum with medial groove and lateral pit; scutum without parapsides, with well-developed notauli; scutellum 0.53 times long as scutum with abrupt posterior border; mesopleuron with distinct omaulus and without scrobal sulcus, scrobal or subalar fovea; metanotum (*sensu* KROMBEIN, KIMSEY and BOHART) as long as combined length of scutum and scutellum, with triangular slightly elevated enclosure and two small medial erect denticles, laterad and behind of them metanotum smooth and shining, enclosure with small dense punctures, area laterad of it with weak transverse rugulae; female strongly brachypterous, tegulae and wing pads present and visible; lateral surfaces of propodeum definitely concave (dorsal view) and divided from dorsal and posterior surfaces by weak definite ridge with postero-dorsal denticle; posterior surface of propodeum abruptly declivous with medial longitudinal carina and short transverse ridges laterad of it, medial carina divided above in two parts and forming a small triangle with transverse metanotal ridge (Fig. 4); hind coxa with dorsoventral carina; hind femora thickened at base with short petiole (Fig. 5); tarsal claws weakly dentate.

Gaster (metasoma, abdomen) glabrous and shining, terga and sterna with scattered minute punctures bearing erect to subappressed setae, second gastral sternum (transverse view) triangular (Fig. 6); anterior surface of first tergum with medial weak elevated part laterad of it with plain area.

Male unknown.

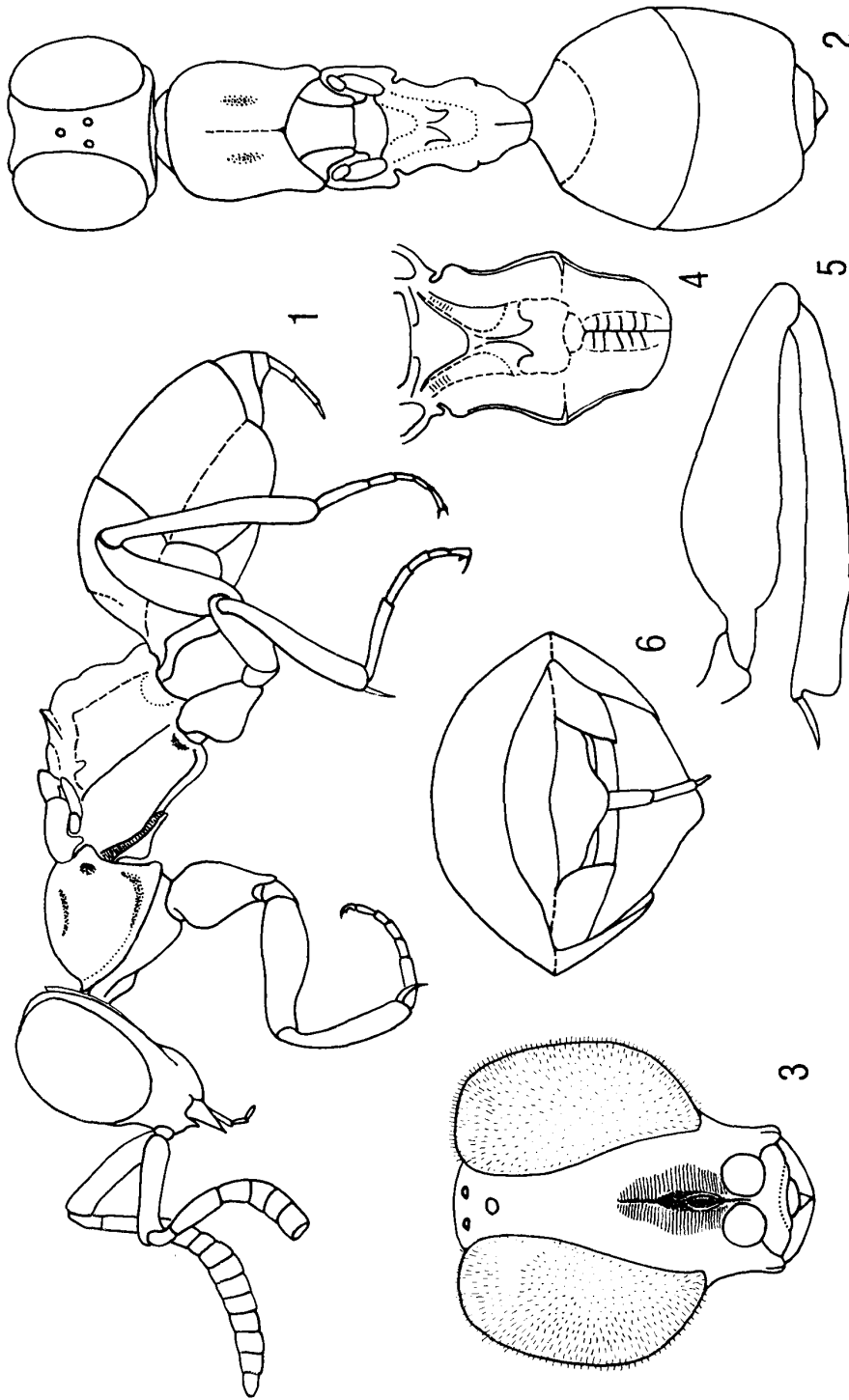
*Discussion.* *Nipponosega* female has strong resemblance with *Serendibula* KROMBEIN, 1983 (Sri Lanka) in having similar general structure of thorax, microtrichiae of eyes and the structure of antennae, but differs by the presence of occipital carina, well developed omaulus on mesopleura, different structure of metanotum and different sculpture of second gastral tergum.

***Nipponosega yamanei* sp. nov.**

*Type locality.* Japan, Honshu, Shishitsuka Ohike near Tsuchiura City, Ibaraki Prefecture.

*Type material.* Holotype, female, Japan, Ibaraki Pref., Shishitsuka Ohike, Tsuchiura City, 17 viii 1993, A. LELEJ (deposited in the National Science Museum, Tokyo).

*Description.* Female. Length 4.0 mm. Head width 0.97 times height (from apex of clypeus to occiput); interocular distance at anterior ocellus 0.26 times head width; tegula small, pads of wings touching the anterior border of metanotum; front laterad and above of scapal basin with dense punctures, frontal punctures separated



Figs. 1-6. *Nipponosega yamanei* sp. nov., female, holotype. — 1, Lateral view; 2, dorsal view; 3, head, frontal view; 4, metanotum and propodeum, dorsal view; 5, hind femora and tibia; 6, gaster, posterior view.

from one another by less than or equal to the diameter of a puncture, not arranged in rows; vertex with slightly more separated punctures except within ocellar triangle, where they are of the same size as on front; pronotum with punctures of the same size as on vertex, except for dorsal surface where they are much more separated and not so deep, scutum with dense punctures; mesopleuron with sparse large punctures; scutellum with delicate transverse rugulae and separate middle-sized punctures; triangular enclosure of metanotum with punctures of the same size as on scutellum; metapleuron and lateral surfaces of propodeum glabrous and shining without definite sculpture; dorsal and posterior propodeal surfaces (except for medial part) smooth with dense confluent punctures; posterior propodeal surface laterad of medial ridge as closed triangular area weakly shining without determined sculpture.

Front, vertex, genae, pronotum and posterior propodeal surface with sparse erect setae; legs with pale erect setae which become denser on femora.

Integument without metallic reflections; head black; mandibles light brown except for chestnut tip; scape, pedicel and first flagellar segment light yellow, second one black, pale below, other ones black, brownish below; pronotum and propleura brownish red, the latter a little paler; scutum and scutellum black; mesopleuron black; tegulae dark brown; wing pads light brown; metapleuron, posterior part of mesopleuron, anterior part of metanotum and lateral surfaces of propodeum reddish brown, other part of metanotum and propodeum reddish brown; legs including coxae light yellow, middle femora beneath brownish; metasoma black, apex of last segment dark brown.

Male unknown.

*Remarks.* The holotype was collected on plant leaves along a forest road.

### Acknowledgments

We are much indebted to Prof. Sk. YAMANE of Kagoshima University for the management of collection trip in Honshu and his kindness and Dr. S. YAMANE of Ibaraki University for his help and hospitality. We would also like to express our hearty gratitude to Dr. Shun-Ichi UENO of the National Science Museum (Nat. Hist.), Tokyo, for critically reading the original manuscript of this paper.

### References

- KIMSEY, L. S., & R. M. BOHART, 1990. *The Chrysidid Wasps of the World*. 652 pp. Oxford University Press, Oxford, New York & Toronto.
- KROMBEIN, K. V., 1983. Biosystematic studies of Ceylonese wasps. XI: A monograph of the Amiseginae and Loboscelidiinae (Hymenoptera, Chrysididae). *Smiths. Contr. Zool.*, (376): 1-79.